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Total Number of Pages in This Submission	27

Application Number	09/981,977
Filing Date	10/17/2001
First Named Inventor	Steve Dispensa
Art Unit	2155
Examiner Name	Asad M. Nawaz
Attorney Docket Number	1574

ENCLOSURES *(Check all that apply)*

- [X] Fee Transmittal Form
- [ ] Fee Attached
- [ ] Amendment / Reply
- [ ] After Final
- [ ] Affidavits/declaration(s)
- [ ] Extension of Time Request
- [ ] Express Abandonment Request
- [ ] Information Disclosure Statement
- [ ] Certified Copy of Priority Document(s)
- [ ] Response to Missing Parts/ Incomplete Application
- [ ] Reply to Missing Parts under 37 CFR 1.52 or 1.53
- [ ] Drawing(s)
- [ ] Licensing-related Papers
- [ ] Petition
- [ ] Petition to Convert to a Provisional Application
- [ ] Power of Attorney, Revocation Change of Correspondence Address
- [ ] Terminal Disclaimer
- [ ] Request for Refund
- [ ] CD, Number of CD(s) _____
- [ ] Landscape Table on CD
- [ ] After Allowance Communication to TC
- [ ] Appeal Communication to Board of Appeals and Interferences
- [X] Appeal Communication to TC **(Appeal Notice, Brief, Reply Brief)**
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- [X] Other Enclosure(s) (please identify below):

Return Receipt Postcard

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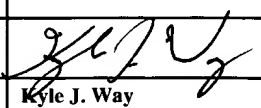
Signature			
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FEE TRANSMITTAL for FY 2006

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) **$1,000.00**

Complete if Known	
Application Number	09/981,977
Filing Date	10/17/2001
First Named Inventor	Steve Dispensa
Examiner Name	Asad M. Nawaz
Art Unit	2155
Attorney Docket No.	1574

METHOD OF PAYMENT (check all that apply)

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1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 (including Reissues)	50	25
Each independent claim over 3 (including Reissues)	200	100
Multiple dependent claims	360	180

Total Claims		Extra Claims		Fee ($)		Fee Paid ($)
_____	- 20 or HP =	_____	x	$50.00	=	$0.00

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims		Extra Claims		Fee ($)		Fee Paid ($)
_____	- 3 or HP =	_____	x	$200.00	=	$0.00

HP = highest number of independent claims paid for, if greater than 3.

Multiple Dependent Claims	
Fee ($)	Fee Paid ($)
_____	_____

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listing under 37 CFR 1.52(e)), the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets		Extra Sheets		Number of each additional 50 or fraction thereof		Fee ($)		Fee Paid ($)
_____	- 100 =	0	/ 50	0	(round up to a whole	x $250.00	=	$0.00

4. OTHER FEE(S)

	Fee Paid ($)
Non-English specification, $130 fee (no small entity discount)	
Other (e.g., late filing surcharge): Notice of Appeal and Appeal Brief	$1,000.00

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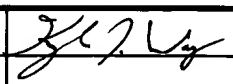
Signature		Registration No. (Attorney/Agent)	45,549	Telephone	(720) 562-2283
Name (Print/Type)	Kyle J. Way			Date	7/5/2006

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OIPE IAP17 JUL 10 2006 PATENT & TRADEMARK OFFICE

Practitioner's Docket No. 1574 *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s):	Steve Dispensa et al.	Confirmation No: 1819
Serial No.:	09/981,977	Examiner: Asad M. Nawaz
Filing Date:	10/17/2001	Group Art Unit: 2155
Title:	PROBE DEVICE FOR TESTING A BROADBAND WIRELESS SYSTEM	

Mailstop: Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Introductory Comments

Pursuant to the provisions of 37 C.F.R. § 41.30 *et seq.*, the Assignee hereby appeals to the Board of Patent Appeals and Interferences (hereinafter "the Board") from the claim rejections issued in the final Office action dated April 7, 2006 (hereinafter "the final Office action"). A notice of appeal was filed on the same day as this appeal brief.

Real Party In Interest

The entire interest in the present application has been assigned to Sprint Communications Company, L.P. (hereinafter "the Assignee"), as recorded at Reel 012747, Frame 0173.

Related Appeals and Interferences

There are no prior or pending related appeals or interferences.

07/10/2006 CNEGA1 00000026 210765 09981977
02 FC:1402 500.00 DA

Status of Claims

Claims 1, 4-21, 24-41 and 44-60 are pending in the application.

Claims 2, 3, 22, 23, 42 and 43 are canceled.

Claims 1, 4-21, 24-41 and 44-60 have been finally rejected.

Claims 1, 4-21, 24-41 and 44-60 are being appealed.

Status of Amendments

No amendments have been filed subsequent to the final rejections.

Summary of Claimed Subject Matter

Independent claim 1 provides a method 900 of operating a probe device (such as the sector probe 695 shown in Fig. 8) for testing a broadband wireless system (such as the broadband wireless system 100 of Fig. 1). (Page 29, lines 17 and 18; page 31, lines 5-13; and Figs. 1, 8 and 9.) In the method 900, an instruction is received into the probe device 695 through a wireless broadband router 690 coupled with the broadband wireless system 100 to execute a plurality of tests. (Page 31, lines 6 and 7; page 30, lines 29 and 30; Fig. 8; and operation 902 of Fig. 9.) The probe device 695 and the wireless broadband router 690 are located on a customer premises 600. (Fig. 8; and page 29, lines 19-21.) The plurality of tests is executed to measure performance of the broadband wireless system 100 based on the instruction. (Page 31, lines 7-9; and operation 904 of Fig. 9.) Performance information is determined from the plurality of tests. (Page 31, lines 9 and 10; and operation 906 of Fig. 9.) Examples of the performance information include delay, download speed, and dropped data packets. (Page 32, lines 28-30.) The performance information is then stored in a memory 830 of the probe device 695. (Page 31, lines 10 and 11; and operation 908 of Fig. 9.)

Independent claim 21 provides a software product for operating a probe device (e.g., the sector probe 695 of Fig. 8) for testing a broadband wireless system (e.g., the system 100 of Fig. 1). The product includes probe device software operational to

perform the method 900 described above, as well as a software storage medium operational to storing the probe device software.

Independent claim 41 provides a probe device (e.g., the sector probe 695 of Fig. 8) for testing a broadband wireless system (e.g., the system 100 of Fig. 1). The probe device 695 includes an interface 810 configured to transfer an instruction into the probe device 695 through a wireless broadband router 690 coupled with the broadband wireless system 100 to execute a plurality of tests. (Page 31, lines 6 and 7; page 30, lines 29 and 30; Fig. 8; and operation 902 of Fig. 9.) Also included is a processor 820 connected to the interface 810 and configured to receive the instruction, and execute the plurality of tests to measure performance of the broadband wireless system 100 based on the instruction. (Page 31, lines 7-9; Fig. 8; and operation 904 of Fig. 9.) The processor 820 is also configured to determine performance information, such as that described above, from the plurality of tests (page 31, lines 9 and 10; Fig. 8; and operation 906 of Fig. 9), and to store the performance information in a memory 830 of the probe device 695 (page 31, lines 10 and 11; Fig. 8; and operation 908 of Fig. 9). In addition, the probe device 695 and the wireless broadband router 690 are located on a customer premises 600. (Fig. 8; and page 29, lines 19-21.)

Grounds of Rejection to Be Reviewed on Appeal

1. Claims 1, 4-8, 15-18, 21, 24-28, 35-38, 41, 44-48 and 55-58 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,829,642 to Giroir et al. (hereinafter "Giroir") in view of U.S. Patent No. 6,807,515 to Vogel et al. (hereinafter "Vogel").
2. Claims 9-12, 19, 20, 29-32, 39, 40, 49-52, 59 and 60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Giroir in view of Vogel and U.S. Patent No. 6,061,722 to Lipa et al. (hereinafter "Lipa").
3. Claims 13, 14, 33, 34, 53 and 54 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Giroir in view of Vogel and U.S. Patent No. 6,553,568 to Fijolek et al. (hereinafter "Fijolek").

Argument

Outline

I. Rejection of Claims 1, 4-8, 15-18, 21, 24-28, 35-38, 41, 44-48 and 55-58 under 35 U.S.C. § 103(a)

- A. Claims 1, 21 and 41 Are Allowable Because Neither Giroir Nor Vogel Teaches or Suggests a Probe Device and a Wireless Broadband Router Located on a Customer Premises, or Receiving an Instruction into the Probe Device through the Wireless Broadband Router
- B. Claims 4-8, 15-18, 24-28, 35-38, 44-48 and 55-58 Are Allowable Because Each Depends from an Allowable Independent Claim
- C. Claims 6-8, 26-28 and 46-48 Are Allowable Because Giroir Does Not Teach or Suggest a Bulk File Transfer Test
- D. Claims 18, 38 and 58 Are Allowable Because Giroir Does Not Teach or Suggest Performance Information Comprising Download Speed

II. Rejection of Claims 9-12, 19, 20, 29-32, 39, 40, 49-52, 59 and 60 under 35 U.S.C. § 103(a)

- A. Claims 9-12, 19, 20, 29-32, 39, 40, 49-52, 59 and 60 Are Allowable Because Each Depends from an Allowable Independent Claim
- B. Claims 12, 32 and 52 Are Allowable Because Lipa Does Not Teach or Suggest Forward Error Correction Testing

III. Rejection of Claims 13, 14, 33, 34, 53 and 54 under 35 U.S.C. § 103(a)

- A. Claims 13, 14, 33, 34, 53 and 54 Are Allowable Because Each Depends from an Allowable Independent Claim
- B. Claims 13, 14, 33, 34, 53 and 54 Are Allowable Because Fijolek Does Does Not Teach or Suggest an Out-of-Lock Indicator Test

I. Rejection of Independent Claims 1, 4-8, 15-18, 21, 24-28, 35-38, 41, 44-48 and 55-58 under 35 U.S.C. § 103(a)

A. Claims 1, 21 and 41 Are Allowable Because Neither Giroir Nor Vogel Teaches or Suggests a Probe Device and a Wireless Broadband Router Located on a Customer Premises, or Receiving an Instruction into the Probe Device through the Wireless Broadband Router

Claim 1 provides a method of operating a probe device for testing a broadband wireless system, the method including, in part, the operation of "*receiving an instruction into the probe device through a wireless broadband router* coupled with the broadband wireless system to execute a plurality of tests, *wherein the probe device and the wireless broadband router are located on a customer premises....*" (Emphasis supplied.) Claims 21 and 41 provide similar limitations.

Regarding claim 1, the final Office action indicates that Giroir teaches "executing the plurality of tests *wherein the broadband wireless system is located on a client-side* (col 13, lines 51-55)." (Page 2 of the final Office action; emphasis supplied.) Further, the final Office action indicates that "Giroir does not explicitly indicate receiving an instruction into the probe device through a wireless router to execute a plurality of tests. Vogel et al teaches a wireless network monitoring system in which *an instruction is received into the probe device through a wireless router to execute a plurality of tests.* (Fig. 4 numerals 400-406, col 2, lines 15-23.)" (Page 3 of the final Office action; emphasis supplied.) Further, the final Office action states that "it is true that neither Giroir nor Vogel *separately* teach the limitation in question. However, Giroir teaches the above-mentioned system on a client-side while Vogel teaches the instruction being received through a wireless router." (Page 8 of the final Office action; emphasis in original.) The Assignee respectfully disagrees, as neither Giroir nor Vogel teach or suggest these limitations as alleged in the final Office action. Each of these references is discussed separately below.

1. Giroir

First, while the final Office action maintains that Giroir teaches "executing the

plurality of tests wherein the broadband wireless system is located on a client-side," this particular limitation is not recited in claims 1, 21 and 41. Instead, claim 1 provides for *the probe device and the wireless broadband router being located on a customer premises*, which Giroir does not teach or suggest.

Generally, Giroir discloses "a method and system of selecting a server from a plurality of servers for accessing Systems Network Architecture (SNA) applications from a client in an Internet Protocol (IP) network." (Abstract.) In normal operation, a TN3270 Client 601 program executes within an end-user workstation (Fig. 4; column 8, lines 57-60) (i.e., a user client) in order to allow the user access to an SNA application via a TN3270 server (Fig. 6; column 9, lines 47-63). On the other hand, probe software executing on a probe client *simulates* a user client "by requesting a connection to an SNA Application through a target TN3270 Server...." (Column 10, lines 42-44.) Fig. 7 depicts the connections between the *probe* client 702 of a Distributed Measurement System 701, a TN3270 server 704, and an SNA application 706 employed to perform the testing. (Column 10, lines 17-31.)

More specifically, Giroir employs an "Availability and Response Time Probe ... to gather measurements on the availability and response time of TN3270 Servers." (Column 10, lines 17-19.) "[T]he Probe mechanism: (a) connects to SNA applications through each TN3270 Server; (b) measures associated response time; and also (c) detects TN3270 Servers failures and the degradation of the response time." (Column 10, lines 59-64. See also Fig. 8, and column 10, line 65, to column 11, line 37.) An Autoserver code indicating the best TN3270 server for a user client to employ for a particular application is then created within the Autoserver URL system based on the results of the tests. (Fig. 12 and column 12, line 64, to column 13, line 9.) The user client connects to the Autoserver URL system upon start-up to determine the optimum server for accessing a particular application. (Fig. 5 and column 9, lines 16-26. See also column 7, lines 5-8, and column 14, lines 4-8.)

Fig. 10 provides another view of client probes 1010 *within a distributed measurement system 1009 of an IP network 1005*. Connected to the network *outside of the distributed measurement system 1009* are multiple groups of user clients 1001-1004. While the probes execute within probe clients of a distributed measurement system

located close to the group of end users running the client program (column 12, lines 3-10), Giroir does not teach or suggest, and in fact, *teaches away from*, placing the probe clients 1010 on a customer premises, as the distributed measurement systems 1009 are shown *within the IP network 1005* of Fig. 10, unlike the user clients 1001-1004. (Column 11, line 50, column 12, line 10. See also the master probe 1209 within the IP Network 1202 in Fig. 12, and not at the location of the TN3270 client 1201.) Thus, *Girior does not teach or suggest a probe device located on a customer premises*, as provided for in claims 1, 21 and 41.

The advisory action of June 20, 2006 (hereinafter, "the advisory action"), indicates in response that "Giroir teaches that the client software usually runs on the customer workstation and the server is placed on the edge of the customer's data center/branch office (see col 2, line 61 to col 3, line 7)." (Continuation sheet of the advisory action.) However, the "client software" referred to therein is the TN3270 (or user) client, and *not* the probe client discussed above.

Also, while Giroir mentions that "TN3270 Servers names or locations need not be known nor configured by the end user," so that "the invention provides for instance a seemless and optimized service to mobile users while still using the best TN3270 Server" (column 14, lines 22-25), *Giroir makes no mention of wireless broadband routers*, much less a wireless broadband router *located on a customer premises*, as provided for in claims 1, 21 and 41.

2. Vogel

Generally, Vogel describes a system and method for monitoring wireless network performance. (Abstract.) As shown in Fig. 1, a probe server 104 receives monitoring parameters via a user interface 102. (Column 3, lines 24 and 25.) In response, the probe server 104 or an associated "post" 108 sends "probes" through a wireless network 110. (Column 3, lines 25-28.) The probes are typically *messages* sent through the wireless network 110 which cause the network 110 to respond with feedback information. (Column 7, lines 30-45; column 4, lines 4 and 5; emphasis supplied.) Thus, the probes of Vogel are messages, and thus are *not probe devices*, as provided for in claims 1, 21 and 41.

Assuming the post may be considered a probe device, Vogel indicates that "[t]he physical location of the post 108 is chosen to be an area where wireless communication with the wireless network 110 is known to function well" and "so that the post may monitor a desired area." (Column 7, lines 6-12.) However, Vogel does not teach or suggest that the post 108 be located *on a customer premises*, as set forth in claims 1, 21 and 41 of the present application. In fact, Vogel does not mention a customer premises at all.

Assuming instead that the probe server 104 may be a probe device, Vogel states in conjunction with Fig. 4 that "[t]he user interface server 202 of the probe server 104 receives 404 the monitoring parameters from the user interface 102." (Column 9, lines 29-31.) Fig. 1 indicates that "the user interface 102 communicates with the probe server 104 via a network 106." (Column 3, lines 2 and 3.) Vogel further states that "[o]ne suitable network 106 is the Internet, although other networks may also be used. ... Alternatively, the user interface 102 may directly communicate with the probe server 104 without the use of a network 106." (Column 3, lines 3-9.) Vogel does *not* indicate that the parameters are received by way of a wireless broadband router. Also, a word search indicates that *Vogel does not mention routers*, much less wireless broadband routers.

In addition, in Fig. 1 the probe server 104 and the posts 108 are shown *separately from the wireless network 110 being monitored.* Thus, Vogel does not indicate teach or suggest receiving instructions into a probe device through a wireless router, as asserted in the final Office action.

In response, the advisory action indicates that "it is in fact Giroir that teaches the use of wireless routers and that Vogel was used as a secondary reference to teach a wireless network monitoring system in which an instruction is received into the probe device through a device to execute a plurality of tests." (Continuation sheet of the advisory action.) However, as mentioned above, Giroir does not teach or suggest wireless routers. Also, Vogel does not disclose receiving an instruction into a probe device through a wireless device of any kind, much less a wireless router. As described above, only the probe messages are sent through the wireless network; any instructions or parameters are transferred through network 106 between the user interface 102, probe server 104 and posts 108. (See Fig. 1.)

Further, the final Office action indicates that "[i]t would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of Vogel et al into those of Giroir to allow the monitoring system and method for measuring wireless service availability and performance to discover problems and allow their correction based on a user's command and parameters especially via widely-available wireless equipment." (Page 3 of the final Office action.) The Assignee respectfully disagrees. Even if Giroir and Vogel provided the elements described in the advisory action, no motivation exists to combine them. Giroir is not interested in testing a broadband wireless system. On the other hand, Vogel monitors its wireless network 110 by way of transferring monitoring parameters from the probe server 104 to one or more posts 108 without traversing any wireless paths, as shown in Fig. 1. (See also the discussion above.) Vogel also does not indicate that passing the parameters through the wireless network 110 would be desirable in any fashion.

Thus, for at least these reasons, the Assignee contends claims 1, 21 and 41 are allowable, and such indication is respectfully requested.

B. Claims 4-8, 15-18, 24-28, 35-38, 44-48 and 55-58 Are Allowable Because Each Depends from an Allowable Independent Claim

As claims 4-8 and 15-18 depend from independent claim 1, claims 24-28 and 35-38 depend from independent claim 21, and claims 44-48 and 55-58 depend from independent claim 41, each of these sets of claims incorporates the limitations of its corresponding independent claims. Therefore, the Assignee contends that claims 4-8, 15-18, 24-28, 35-38, 44-48 and 55-58 are allowable for at least the reasons provided above regarding claims 1, 21 and 41, and such indication is respectfully requested.

C. Claims 6-8, 26-28 and 46-48 Are Allowable Because Giroir Does Not Teach or Suggest a Bulk File Transfer Test

More specifically regarding claims 6-8, 26-28 and 46-48, which provide for one of the tests being a bulk file transfer test, the final Office action states that "Giroir teaches

the method of claim 1, wherein one of the plurality of tests comprises a bulk file transfer test. (col 10, lines 17-67; col 11, lines 30-35)" (Page 3 of the final Office action.) The Assignee disagrees with the allegation. Giroir only discusses testing of *server availability and response time* by way of receiving an Application Welcome Screen as a result of requesting an SNA Application. (Fig. 7 and column 10, lines 20-30.) Thus, the probes of Giroir are not involved in bulk file transfers, much less using such transfers for testing purposes.

In response, the advisory action indicates that "Giroir teaches the probe client measuring the availability and response time by a process that can be used multiple times on a plurality of applications (see col 10, lines 17-65)." (Continuation sheet of the advisory action.) The Assignee again respectfully disagrees. The disclosure of separate instances of availability and response time testing across multiple applications in Giroir does not teach or suggest bulk file transfer testing, which involves measuring the *overall transfer time* of a set of files communicated over the network. (See, for example, Fig. 12; and page 33, lines 3-16 of the present application.)

Thus, the Assignee asserts that claims 6-8, 26-28 and 46-48 are allowable for at least these additional reasons, and such indication is respectfully requested.

D. Claims 18, 38 and 58 Are Allowable Because Giroir Does Not Teach or Suggest Performance Information Comprising Download Speed

As to claims 18, 38 and 58, which further provide for the performance information including download speed, the final Office action indicates that Giroir teaches such information, specifically at column 10, lines 55-65. (Page 4 of the final Office action.) The Assignee respectfully disagrees. Again, Giroir only teaches availability and response times of the connections with TN3270 servers, and does not teach or suggest testing or measuring download speed.

In response, the advisory action states that "Giroir teaches that that the probe mechanism connects to the application through each server while measuring the associated response time. Therefore, the application is downloaded to the customer from the server and the time lapsed is measured. This in its primitive definition is at least a measurement of download speed (see col 10, lines 55-65)." (Continuation sheet of the

advisory action.) The Assignee again respectfully disagrees. For one, only the application welcome screen is transferred. As indicated in Giroir, the measurements being undertaken are availability and response time; Giroir does not teach or suggest measuring how fast any actual data is transferred (i.e., download speed).

Thus, the Assignee contends that claims 18, 38 and 58 are allowable for at least this additional reason, and such indication is respectfully requested.

II. Rejection of Claims 9-12, 19, 20, 29-32, 39, 40, 49-52, 59 and 60 under 35 U.S.C. § 103(a)

A. Claims 9-12, 19, 20, 29-32, 39, 40, 49-52, 59 and 60 Are Allowable Because Each Depends from an Allowable Independent Claim

Claims 9-12, 19 and 20 depend from independent claim 1, claims 29-32, 39 and 40 depend from independent claim 21, and claims 49-52, 59 and 60 depend from independent claim 41. Thus, each of these sets of claims incorporates the limitations of its corresponding independent claim. Therefore, the Assignee contends that claims 9-12, 19, 20, 29-32, 39, 40, 49-52, 59 and 60 are allowable for at least the reasons provided above regarding claims 1, 21 and 41, and such indication is respectfully requested.

B. Claims 12, 32 and 52 Are Allowable Because Lipa Does Not Teach or Suggest Forward Error Correction Testing

Additionally with respect to claims 12, 32 and 52, the final Office action indicates that Lipa teaches forward error correction testing, citing column 9, lines 1-60. (Page 5 of the final Office action.) The Assignee respectfully disagrees. Lipa appears to exclusively employ ping and reply packets for purposes of connection testing. (See column 6, line 57, to column 7, line 50; and column 8, line 25, to column 9, line 16, for example.) Lipa makes no mention of forward error correction testing.

In response, the advisory action alleges that "Lipa teaches that there must be enough data to continue with the application. One must have a proper latency rating, otherwise, the user must wait and correct the deficiency in the rating. Once there is

sufficient rating, and a threshold for classification is met, the program can continue. The thresholds can vary and the proper threshold for the application must be met (see col 9, lines 42-61)." (Continuation sheet of the advisory action.) However, latency, or the delay between a ping and its associated response (see column 7, lines 1-9), has no relation with forward error correction, which allows the detection and correction of data errors by the use of redundant information supplied along with the data being transferred.

Thus, the Assignee asserts that claims 12, 32 and 52 are allowable for at least this additional reason, and such indication is respectfully requested.

III. Rejection of Claims 13, 14, 33, 34, 53 and 54 under 35 U.S.C. § 103(a)

A. Claims 13, 14, 33, 34, 53 and 54 Are Allowable Because Each Depends from an Allowable Independent Claim

Claims 13 and 14 depend from independent claim 1, claims 33 and 34 depend from independent claim 21, and claims 53 and 54 depend from independent claim 41. Thus, each of these sets of claims incorporates the provisions of its associated independent claims. Therefore, the Assignee contends that claims 13, 14, 33, 34, 53 and 54 are allowable for at least the reasons provided above regarding claims 1, 21 and 41, and such indication is respectfully requested.

B. Claims 13, 14, 33, 34, 53 and 54 Are Allowable Because Fijolek Does Not Teach or Suggest an Out-of-Lock Indicator Test

More specifically regarding claims 13, 33 and 53, which provide for the plurality of tests including an out-of-lock indicator test, the final Office action indicates that Fijolek teaches such a test at column 8, lines 10-40. (Page 7 of the final Office action.) The Assignee respectfully disagrees with this assertion, as no mention is made of an out-of-lock indicator test. Also, as to claims 14, 34 and 54, which provide for an out-of-lock indicator test that determines the presence of a clean Quadrature Amplitude Modulation (QAM) signal, page 7 of the final Office action indicates that Fijolek teaches such a determination. The Assignee respectfully disagrees. Fijolek mentions the use of QAM

as a modulation method (column 8, lines 19-28), but testing for an out-of-lock indicator signal, or for the presence of a clean QAM signal, is not discussed.

In response, the advisory action states that "Fijolek teaches that an RF interface uses a signal modulation technique (QAM) as a means of encoding digital information over various medium. In this case, QAM-64 is used in the RF interface to obtain a clean signal in accordance with IEEE standards (as opposed to other levels)." (Continuation sheet of the advisory action.) However, Fijolek does not teach or suggest an *out-of-lock indicator test* for determining the quality of any modulation technique, including QAM.

Therefore, the Assignee contends that claims 13, 14, 33, 34, 53 and 54 are allowable for at least these additional reasons, and such indication is respectfully requested.

Conclusion

In light of the foregoing remarks, the Assignee submits to the Board that the final rejection of claims 1, 4-21, 24-41 and 44-60 is erroneous, and respectfully requests its reversal.

The Office is hereby authorized to charge Deposit Account No. 21-0765 the requisite fees for this appeal brief (37 C.F.R. 41.20(b)(2)) and its associated notice of appeal (37 C.F.R. 41.20(b)(1)). The Assignee believes that no additional fees are due with respect to this filing. However, should the Office determine that additional fees are necessary, the Office is hereby authorized to charge Deposit Account No. 21-0765.

Respectfully submitted,

Date: 7/5/06

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Claims Appendix

The following is a list of claims involved in this appeal:

1. A method of operating a probe device for testing a broadband wireless system, the method comprising:

receiving an instruction into the probe device through a wireless broadband router coupled with the broadband wireless system to execute a plurality of tests, wherein the probe device and the wireless broadband router are located on a customer premises;

executing the plurality of tests to measure performance of the broadband wireless system based on the instruction;

determining performance information from the plurality of tests; and

storing the performance information in a memory of the probe device.

2, 3. (Canceled)

4. The method of claim 1 wherein one of the plurality of tests comprises a web surfing test.

5. The method of claim 4 wherein the web surfing test comprises:

transferring a request for a web page; and

receiving the web page.

6. The method of claim 1 wherein one of the plurality of tests comprises a bulk file transfer test.

7. The method of claim 6 wherein the bulk file transfer test comprises:

generating and transmitting a request to retrieve files from a file server; and

receiving the files from the file server.

8. The method of claim 6 wherein the bulk file transfer test comprises transmitting files to a file server.

9. The method of claim 1 wherein one of the plurality of tests comprises a ping test to measure delay.

10. The method of claim 1 wherein one of the plurality of tests comprises a raw channel capacity test.

11. The method of claim 10 wherein the raw channel capacity test comprises a bit-error-rate test.

12. The method of claim 1 wherein one of the plurality of tests comprises a forward error correction test.

13. The method of claim 1 wherein one of the plurality of tests comprises an out of lock indicator test.

14. The method of claim 13 wherein the out of lock indicator test comprises determining a presence of a clean Quadrature Amplitude Modulation signal.

15. The method of claim 1 further comprising:
transmitting the performance information from the probe device.

16. The method of claim 1 further comprising:
retrieving the performance information from the memory.

17. The method of claim 1 wherein the performance information comprises delay.

18. The method of claim 1 wherein the performance information comprises download speed.

19. The method of claim 1 wherein the performance information comprises a number of dropped packets.

20. The method of claim 1 wherein the performance information comprises a number of acknowledgement packets.

21. A software product for operating a probe device for testing a broadband wireless system, the software product comprising:

probe device software operational when executed by a processor to direct the processor to receive an instruction into the probe device through a wireless broadband router coupled with the broadband wireless system to execute a plurality of tests, execute the plurality of tests to measure performance of the broadband wireless system based on the instruction, determine performance information from the plurality of tests, and store the performance information in a memory of the probe device, wherein the probe device and the wireless broadband router are located on a customer premises; and

a software storage medium operational to store the probe device software.

22, 23. (Canceled)

24. The software product of claim 21 wherein one of the plurality of tests comprises a web surfing test.

25. The software product of claim 24 wherein the probe device software is operational when executed by the processor to direct the processor to transfer a request for a web page and receive the web page.

26. The software product of claim 21 wherein one of the plurality of tests comprises a bulk file transfer test.

27. The software product of claim 26 wherein the probe device software is operational when executed by the processor to direct the processor to generate and

transmit a request to retrieve files from a file server and receive the files from the file server.

28. The software product of claim 26 wherein the probe device software is operational when executed by the processor to direct the processor to transmit files to a file server.

29. The software product of claim 21 wherein one of the plurality of tests comprises a ping test to measure delay.

30. The software product of claim 21 wherein one of the plurality of tests comprises a raw channel capacity test.

31. The software product of claim 30 wherein the raw channel capacity test comprises a bit-error-rate test.

32. The software product of claim 21 wherein one of the plurality of tests comprises a forward error correction test.

33. The software product of claim 21 wherein one of the plurality of tests comprises an out of lock indicator test.

34. The software product of claim 33 wherein the probe device software is operational when executed by the processor to direct the processor to determine a presence of a clean Quadrature Amplitude Modulation signal.

35. The software product of claim 21 wherein the probe device software is operational when executed by the processor to direct the processor to transmit the performance information from the probe device.

36. The software product of claim 21 wherein the probe device software is

operational when executed by the processor to direct the processor to retrieve the performance information from the memory.

37. The software product of claim 21 wherein the performance information comprises delay.

38. The software product of claim 21 wherein the performance information comprises download speed.

39. The software product of claim 21 wherein the performance information comprises a number of dropped packets.

40. The software product of claim 21 wherein the performance information comprises a number of acknowledgement packets.

41. A probe device for testing a broadband wireless system, the probe device comprising:

an interface configured to transfer an instruction into the probe device through a wireless broadband router coupled with the broadband wireless system to execute a plurality of tests; and

a processor connected to the interface and configured to receive the instruction, execute the plurality of tests to measure performance of the broadband wireless system based on the instruction, determine performance information from the plurality of tests, and store the performance information in a memory of the probe device;

wherein the probe device and the wireless broadband router are located on a customer premises.

42, 43. (Canceled)

44. The probe device of claim 41 wherein one of the plurality of tests comprises a web surfing test.

45. The probe device of claim 44 wherein:

the interface is configured to transfer a request for a web page from the processor and transfer the web page to the processor; and

the processor is configured to transfer the request for the web page and receive the web page.

46. The probe device of claim 41 wherein one of the plurality of tests comprises a bulk file transfer test.

47. The probe device of claim 46 wherein:

the processor is configured to generate and transmit a request to retrieve files from a file server and receive the files from the interface; and

the interface is configured to transfer the request from the processor to the file server and transfer the files from the file server to the processor.

48. The probe device of claim 47 wherein:

the processor is configured to transmit the files to the interface; and

the interface is configured to transfer the files from the processor to the file server.

49. The probe device of claim 41 wherein one of the plurality of tests comprises a ping test to measure delay.

50. The probe device of claim 41 wherein one of the plurality of tests comprises a raw channel capacity test.

51. The probe device of claim 50 wherein the raw channel capacity test comprises a bit-error-rate test.

52. The probe device of claim 41 wherein one of the plurality of tests

comprises a forward error correction test.

53. The probe device of claim 41 wherein one of the plurality of tests comprises an out of lock indicator test.

54. The probe device of claim 53 wherein the processor is configured to determine a presence of a clean Quadrature Amplitude Modulation signal.

55. The probe device of claim 41 wherein:

the processor is configured to transmit the performance information; and

the interface is configured to transfer the performance information from the processor to the probe device.

56. The probe device of claim 41 wherein the processor is configured to retrieve the performance information from the memory.

57. The probe device of claim 41 wherein the performance information comprises delay.

58. The probe device of claim 41 wherein the performance information comprises download speed.

59. The probe device of claim 41 wherein the performance information comprises a number of dropped packets.

60. The probe device of claim 41 wherein the performance information comprises a number of acknowledgement packets.

Evidence Appendix

No other evidence has been submitted by the Assignee or entered by the Examiner.

Related Proceedings Appendix

There are no prior or pending related appeals or interferences.